

PTO/SB/82 (09-03)

Approved for use through 11/30/2005. OMB 0651-0035

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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<b>REVOCATION OF POWER OF ATTORNEY WITH NEW POWER OF ATTORNEY AND CHANGE OF CORRESPONDENCE ADDRESS</b>	Application Number	09/367,153	<b>RECEIVED CENTRAL FAX CENTER AUG 06 2004</b>
	Filing Date	8/9/1999	
	First Named Inventor	SIBBALD	
	Art Unit	2644	
	Examiner Name	FAULK, Devona E.	
	Attorney Docket Number	62-194	

I hereby revoke all previous powers of attorney given in the above-identified application.

☐ A Power of Attorney is submitted herewith.

OR

☒ I hereby appoint the practitioners associated with the Customer Number:

40032

☒ Please change the correspondence address for the above-identified application to:☒ The address associated with  
Customer Number:


40032

OR

<input type="checkbox"/> Firm or Individual Name				
Address				
Address				
City	State	Zip		
Country				
Telephone	Fax			

I am the:

☐ Applicant/Inventor.☒ Assignee of record of the entire interest. See 37 CFR 3.71.  
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)**SIGNATURE of Applicant or Assignee of Record**

Name	CHON HOCK LEOW		
Signature			
Date	4/2/04	Telephone	(408) 428-6600

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☒ \*Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.36. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/SB/96 (08-03)  
Approved for use through 07/31/2008. OMB 0851-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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**STATEMENT UNDER 37 CFR 3.73(b)**

Applicant/Patent Owner: CREATIVE TECHNOLOGY LTD.  
Application No./Patent No.: 09/367,153 Filed/Issue Date: 8/9/1999  
Entitled: NEAR-FIELD DISTANCE EFFECTS FOR 3D-SOUND SYNTHESIS  
CREATIVE TECHNOLOGY LTD., a CORPORATION  
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or  
2. ☐ an assignee of less than the entire right, title and interest.  
The extent (by, percentage) of its ownership interest is \_\_\_\_\_ %  
in the patent application/patent identified above by virtue of either:

A. ☐ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel/Frame \_\_, or for which a copy thereof is attached.

OR

B. ☒ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: SIBBALD, Alastair et al. To: Central Research Laboratories Limited  
The document was recorded in the United States Patent and Trademark Office at  
Reel 010303, Frame 0305, or for which a copy thereof is attached.
2. From: Central Research Laboratories Limited To: Creative Technology Ltd.  
The document was recorded in the United States Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
3. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

☒ Copies of assignments or other documents in the chain of title are attached.  
**[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]**


The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

4/2/04  
Date  
(408) 428-6600  
Telephone number

CHON HOCK LEOW  
Typed or printed name  
[Signature]  
Signature  
CHIEF TECHNOLOGY OFFICER  
Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Form PTO-1595 (Rev. 10/02) OMB No. 0651-0027 (exp. 6/30/2005) Tab settings ⇌ ⇌ ⇌ ▼ ▼ ▼ ▼ ▼ ▼ ▼		RECORDATION FORM COVER SHEET <b>PATENTS ONLY</b>		U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office	
To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.					
<b>1. Name of conveying party(ies):</b> CENTRAL RESEARCH LABORATORIES LIMITED		<b>2. Name and address of receiving party(ies)</b> Name: CREATIVE TECHNOLOGY LTD. Internal Address: LEGAL DEPARTMENT			
Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
<b>3. Nature of conveyance:</b> <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other _____		Street Address: 31 International Business Park CREATIVE RESOURCE			
Execution Date: 12/3/2003		City: SINGAPORE State: Zip: 609921			
		Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
<b>4. Application number(s) or patent number(s):</b> If this document is being filed together with a new application, the execution date of the application is: _____ A. Patent Application No.(s) 09/381,100 B. Patent No.(s) _____ Additional numbers attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					
<b>5. Name and address of party to whom correspondence concerning document should be mailed:</b> Name: P. FRANCOIS DE VILLIERS Internal Address: CREATIVE LABS, INC. LEGAL DEPARTMENT Street Address: 1901 MCCARTHY BOULEVARD City: MILPITAS State: CA Zip: 95035		<b>6. Total number of applications and patents involved:</b> 18 <b>7. Total fee (37 CFR 3.41).....\$</b> 720.00 <input checked="" type="checkbox"/> Enclosed <input type="checkbox"/> Authorized to be charged to deposit account			
		<b>8. Deposit account number:</b>			
<b>DO NOT USE THIS SPACE</b>					
<b>9. Signature.</b>  P. FRANCOIS DE VILLIERS Name of Person Signing   Signature  2/20/04 Date					
Total number of pages including cover sheet, attachments, and documents: 8					

Mail documents to be recorded with required cover sheet information to:  
Commissioner of Patents & Trademarks, Box Assignments  
Washington, D.C. 20231

**CONTINUATION OF RECORDATION FORM COVER SHEET  
ITEM NUMBER 4.****Assignment of:**

Application No.	Patent No.
09/270,768	n/a
09/367,153	n/a
09/185,711	n/a
09/579,122	n/a
09/709,446	n/a
09/711,539	n/a
10/220,722	n/a
08/537,437	5,666,425
08/271,602	5,600,727
08/663,317	5,751,815
08/640,777	6,643,375
08/851,721	5,917,916
09/171,366	6,208,687
09/403,523	6,402,782
09/335,759	6,498,857
09/332,601	6,577,736
09/297,460	6,614,910



## Patent Assignment (USA)

Central Research Laboratories Limited

and

Creative Technology Ltd.

3 DECEMBER 2003

THIS ASSIGNMENT is made on **3 DECEMBER** 2003

**BETWEEN:**

- (1) **CENTRAL RESEARCH LABORATORIES LIMITED** (No. 02684463) whose registered office is at Dawley Road, Hayes, Middlesex UB3 (the "Assignor");
- (2) **CREATIVE TECHNOLOGY LTD.** (incorporated in Singapore) whose principal place of business is at 31 International Business Park, Creative Resource, Singapore 609921 (the "Assignee").

**RECITAL**

By an agreement made between the Assignor, the Assignee and others dated on or about the date of this agreement (the "Sale and Purchase Agreement") the Assignor agreed to assign to the Assignee on the terms set out in this assignment the patents ("Patents") and the benefit of the patent applications (the "Patent Applications") details of which are set out in the schedule hereto.

**THE PARTIES AGREE AS FOLLOWS:**

**1. ASSIGNMENT**

- 1.1 In pursuance of the Sale and Purchase Agreement and in consideration of the sum of £1 now paid by the Assignee to the Assignor (receipt of which the Assignor hereby acknowledges), the Assignor hereby assigns to the Assignee absolutely all its right, title and interest in and to:

- (a) the Patents; and
- (b) the Patent Applications (for the avoidance of doubt including in respect of all countries designated in the Patent Applications), to the intent that the grant of any patent thereon shall be in the name of and vest in the Assignee,

together with all the Assignor's statutory and common law rights attaching to the Patents and the Patent Applications and all rights, privileges and powers arising or accrued therefrom including, without limitation, the right to bring proceedings for damages and other remedies in respect of any infringement occurring prior to the date hereof of the rights assigned by this assignment and to retain any damages obtained as a result of such proceedings.

- 1.2 The assignment of the rights in the Patents and Patent Applications shall also include the right to apply for, prosecute and obtain patents (or similar protection) that may derive priority from or have equivalent claims to or be based on the Patents or the Patent Applications in any country in the world.

**2. FURTHER ASSURANCE**

- 2.1 The Assignor further covenants that at the request and cost of the Assignee it will at all times hereafter do all such acts and execute all such documents as may reasonably be necessary or desirable to enable the Assignee or, if it shall so direct, any other member of the Buyer's Group (as defined in the Sale and Purchase Agreement) to enjoy the benefit of the rights

hereby assigned, to apply for and obtain registration of the Assignee or such other member of the Buyer's Group as the registered proprietor of the Patents and the Patent Applications and otherwise to give effect to this assignment. The Assignee hereby undertakes to indemnify the Assignor against all liabilities, obligations and costs incurred by the Assignor in enabling, at the Assignee's request, a member of the Buyer's Group other than the Assignee to enjoy the benefit of the rights hereby assigned.

- 2.2 At the Assignee's request and cost, the Assignor shall as soon as reasonably practicable transfer, and shall procure the transfer by the relevant members of the Sellers' Group (as defined in the Sale and Purchase Agreement) of, all files and records (including those in the possession of its agents) relating to the filing, prosecution and maintenance of the Patents and the Patent Applications.

3. **ENTIRE AGREEMENT**

- 3.1 This assignment and the Sale and Purchase Agreement (including without limitation any warranties, covenants, undertakings and indemnities set out therein) set out the entire agreement and understanding between the parties in respect of the subject matter of this assignment.

4. **GOVERNING LAW**

- 4.1 This assignment shall be governed by and construed in accordance with English law and the English courts shall have exclusive jurisdiction in respect of it.

**IN WITNESS** whereof this assignment has been executed on the date first above written.

**SCHEDULE**  
**Patents and Patent Applications**

Priority	Title	Application No.	Publication No.	Status
23 Apr 93	Sound-recording, processing and reproduction means.	USA 08/537,437	US 5,666,425	US Granted 9 Sept 97
17 Jul 93	Determination of position.	USA 08/271,602	US 5,600,727	US Granted 2 Feb 97
21 Dec 93	3D-audio signal balance control.	USA 08/663,317	US 5,751,815	US Granted 12 May 98
25 Nov 93	Transaural crosstalk signal processing means.	USA 08/640,777	US 6,643,375	Granted 4/11/2003
16 Apr 96	Filter switching method.	USA 09/171,366	US 6,208,687	Granted
17 May 96	Headphone switching device.	USA 08/851,721	US 5,917,916	US Granted 29.06.99
1 Dec 96	Stereo sound expander.	USA 09/297,460	US 6614 910	Granted 2 September 2003
19 Apr 97	Telephone transmission of 3D-sound.	USA 09/381,100		Pending
15 May 97	Improved artificial ear and canal, and method of making same.	USA 09/403,523	US 6,402,782	Granted
17 Mar 98	Sensaura with rear lo-pass filter.	USA 09/270768		Pending
13 Dec 97	Near-field distance effects for 3D-sound synthesis.	USA 09/367,153		Pending
20 Jun 98	Composite/distributed sound sources for 3D-Sound.	USA 09/335,759	US 6,498,857	Granted
24 Jul 98	Distance dependent crosstalk cancellation.	USA 09/185,711		CIP with 12,582, 4.11.98
15 Oct 98	Multi-speaker method for 3D-sound reproduction.	USA 09/332601	US 6,577,736	Granted
29 May 99	Scaled Head-Related Transfer Functions.	US 09/579,122		Pending
7 March 00	Novel ambient noise-cancellation means for mobile telephones and headphones.	US 10/220,722		Pending
19 Sept 00	Sound-wave scattering synthesis for improved headphone virtualisation.	US 09/709,446		Pending
19 <sup>th</sup> Sep 00	Wavelet-based signal-processing engine for the synthesis of sound-wave scattering effects.	US 09/711,539		Pending



Signed by

KEN GRAY

for and on behalf of CENTRAL  
RESEARCH LABORATORIES  
LIMITED in the presence of:

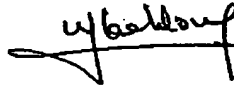
*[Handwritten signature]*

*[Handwritten signature]*  
Company Secretary

Signed by Ng Keh Long )

for and on behalf of CREATIVE  
TECHNOLOGY LTD. )

in the presence of: )



Ng Keh Long



MICHAEL WONG

(Legal Manager)

c/o CREATIVE TECHNOLOGY LTD  
31 International Business Park  
Creative Resource  
Singapore 608821  
Tel: 695 4000 Fax: 695 4899

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AUG 06 2004

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

OFFICIAL

In re application of:

SIBBALD, et al.

Application No.: 09/367,153

Filed: August 9, 1999

For: A METHOD OF PROCESSING AN  
AUDIO SIGNAL

Examiner: Devona E. Faulk

Art Unit: 2644

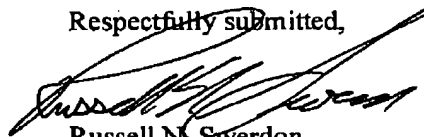
CERTIFICATE OF TRANSMISSION UNDER 37 CFR 1.8I hereby certify that the following correspondence is being  
facsimile transmitted to the United States Patent and  
Trademark Office on August 6, 2004.Cynthia K. Dawn  
Cynthia K. DawnRESUBMISSION OF CHANGE OF CORRESPONDENCE ADDRESS  
AND REVOCATION OF POWER OF ATTORNEY  
WITH NEW POWER OF ATTORNEY

At the request of Forester W. Isen, Supervisory Examiner for Art Unit 2644, Applicants  
hereby resubmit the Change of Correspondence Address, Revocation of Power of Attorney  
with New Power of Attorney previously submitted by First Class Mail on April 4, 2004.

1. Revocation of Power of Attorney with New Power of Attorney and Change of  
Correspondence Address.
2. Statement Under 37 CFR 3.73(b);
3. Patent Cover Sheet and Copy of Assignment;
4. Copy of PTO Stamped Return Receipt Postcard.

FAX NO. (GROUP 2644): 703-872-9306  
TOTAL NO. OF PAGES: 12

Respectfully submitted,



Russell N. Swerdon

Reg. No. 36,943

Date: August 6, 2004

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